**IN THE CLAIMS:**

1-20 (CANCELLED)

21. (CURRENTLY AMENDED) A system for discovering and maintaining geographic location information for network sites, the system comprising:

a portable computing unit having a location discovery entity, a message generator configured to generate network messages, and a communication facility ~~for transmitting~~ configured to transmit the network messages onto a computer network; and

a location generator configured ~~and arranged~~ to determine physical coordinates for its current location, the location generator coupled to the computing unit for providing physical coordinates thereto, ~~;~~whereby~~,~~ the discovery entity and the message generator cooperate to acquire physical coordinates from the location generator for a given network site, and to load the acquired physical coordinates into one or more network messages, and the communication facility transmits the one or more network messages containing the physical coordinates; and

a network switch configured to receive the network messages that contain the physical coordinates and to store the physical coordinates in a memory location associated with the network site, the network switch further configured to append the physical coordinates to a message from the network site to another network site. ~~to a designated network entity; and~~

~~the one or more network messages correspond to an emergency call from the source entity~~.

22. (PREVIOUSLY PRESENTED) The system of claim 21 wherein

the location generator includes a Global Positioning System (GPS) receiver for determining physical coordinates.

23. (PREVIOUSLY PRESENTED) The system of claim 22 wherein

the location generator further includes an inertial navigation unit configured to produce signals responsive to the unit being moved, the inertial navigation unit coupled to the portable computing unit for providing the inertial navigation signals thereto, and

the discovery entity is configured to integrate the inertial navigation signals with physical coordinates acquired by the GPS receiver for a substitute location to produce physical coordinates for the given network site.

24. (PREVIOUSLY PRESENTED) The system of claim 21 further comprising one or more antenna coupled to the location discovery entity of the portable computing unit, the one or more antenna configured to receive radio signals from a plurality of transmitting base stations, wherein

the radio signals are encoded with the physical coordinates of the respective base station, and

the location discovery entity is configured to compute the physical coordinates for its current location based on the received radio signals.

25. (PREVIOUSLY PRESENTED) The system of claim 24 wherein the location discovery entity employs triangulation techniques to compute the physical coordinates for its current location.

26. (PREVIOUSLY PRESENTED) The system of claim 24 wherein the radio signals are Ultra Wideband (UWB) radio signals.

27. (PREVIOUSLY PRESENTED) The system of claim 21 wherein the given network site corresponds to a Voice over Internet Protocol (VoIP) phone.

28. (CURRENTLY AMENDED) A method for discovering and maintaining location information of a plurality of network entities forming a computer network, the method comprising the steps of:

utilizing a Global Positioning System (GPS) unit to derive physical coordinates of a location associated with a first network entity of the computer network;

generating one or more network messages containing the physical coordinates derived for the first network entity; and

sending the one or more network messages containing the physical coordinates to a second network entity of the computer network, whereby the second network entity associates the physical coordinates with the first network entity; ~~,~~

appending, by the second network entity, the physical coordinates to a message sent from the first network entity to a third network entity, the message switched though the second network entity. ~~and the one or more network messages correspond to an emergency call from the source entity~~ .

29. (CURRENTLY AMENDED) A storage medium of an intermediate network device containing program instructions executable by a processing element for associating physical location information with one or more network messages originating from a source entity, the one or more network messages being directed to a destination entity, the program instructions comprising program instructions for:

receiving physical coordinates of the location of the source entity;

storing the physical coordinates received for the source entity at the intermediate network device;

receiving the one or more network messages originating from the source entity, the one or more network messages corresponding to an emergency call from the source entity;

forwarding the one or more network messages toward the destination entity; and

in response to the one or more messages, sending the physical coordinates received for the source entity to the destination entity~~, and the one or more network messages correspond to an emergency call from the source entity~~.

30. (PREVIOUSLY PRESENTED) The storage medium of claim 29 wherein the program instructions for sending comprise program instructions for appending the physical coordinates to at least one of the one or more network messages originating from the source entity.

31. (PREVIOUSLY PRESENTED) The storage medium of claim 29 wherein the program instructions for sending comprise program instructions for:

generating one or more network messages that are separate from the network messages originating from the source entity;

loading the physical coordinates into the one or more separate network messages; and

sending the one or more separate network messages to the destination entity.

32. (PREVIOUSLY PRESENTED) The storage medium of claim 29 wherein

the source entity is a Voice over Internet Protocol (VoIP) phone.

33. (PREVIOUSLY PRESENTED) The storage medium of claim 32 wherein the destination entity corresponds to a Public Safety Answering Point (PSAP).

34. (PREVIOUSLY PRESENTED) The storage medium of claim 29 wherein

the program instructions are executed by a network switch having a memory, and

the physical coordinates are stored in the memory of the network switch.

35. (CURRENTLY AMENDED) A system for discovering and maintaining geographic location information for network sites, the system comprising:

means for generating physical coordinates corresponding to the location of a first network entity;

means for loading the physical coordinates generated for the first network entity into one or more network messages; and

means for sending the one or more network messages to a selected intermediate network device for storage thereby~~, and the one or more network messages correspond to an emergency call from the source entity~~

means for appending, at the selected intermediate network device, the physical coordinates to a message sent from the first network entity to a third network entity.

36. (PREVIOUSLY PRESENTED) The system of claim 35 wherein the generating means utilizes at least one of a plurality of Global Positioning System (GPS) signals and an inertial navigation unit to generate the physical coordinates.

37. (PREVIOUSLY PRESENTED) The system of claim 35 wherein the network sites correspond to the network entities of a computer network disposed within an office.

38. (PREVIOUSLY PRESENTED) The system of claim 37 wherein the network entities include one or more of Voice over Internet Protocol (VoIP) phones, personal computers, servers and intermediate network devices.

39. (PREVIOUSLY PRESENTED) The system of claim 35 wherein

the selected intermediate network device has a plurality of ports,

the physical coordinates generated for the first network entity are received on a given port,

the intermediate network device associates the received physical coordinates with the given port.

40. (PREVIOUSLY PRESENTED) The system of claim 39 wherein the received physical coordinates are bound to the given port.

41. (CURRENTLY AMENDED) The system as in claim 21, ~~further comprising~~ wherein the message is part of an ~~:the~~ emergency call ~~is~~ to a Public Safety Answering Point (PSAP).

42. (CURRENTLY AMENDED) The method of claim 28, ~~further comprising:~~ wherein the message is part of an ~~sending the~~ emergency call to a Public Safety Answering Point (PSAP).

43. (CURRENTLY AMENDED) The storage medium of claim 29 wherein the destination entity is ~~, comprising: storing instructions for sending the emergency call to~~ a Public Safety Answering Point (PSAP).

44. (CURRENTLY AMENDED) The system of claim 35, ~~further comprising:~~ wherein the message is part of an ~~means for sending the~~ emergency call to a Public Safety Answering Point (PSAP).

45. (PREVIOUSLY PRESENTED) A method for discovering and maintaining geographic location information for network sites, comprising:

generating physical coordinates corresponding to the location of a first network entity;

loading the physical coordinates generated for the first network entity into one or more network messages;

sending the one or more network messages to a selected intermediate network device, the selected intermediate network device having a plurality of ports;

receiving the physical coordinates generated for the first network entity on a given port; and

associating the received physical coordinates with the given port.

46. (PREVIOUSLY PRESENTED) The method of claim 45, further comprising:

binding the received physical coordinates to the given port.

47. (CURRENTLY AMENDED) The method of claim 45, further comprising:

generating ~~the~~ one or more network messages at the first network entity for ~~to correspond to~~ an emergency call; and

receiving the one or more network messages from the first network entity on the given port of the intermediate network device; and

sending, by the intermediate device, the physical coordinates associate with the given port to a Public Safety Answering Point (PSAP) in response to receiving the one or more network messages for the emergency call .

48. (CANCELLED)

49. (PREVIOUSLY PRESENTED) The method of claim 45, further comprising:

using a Voice over Internet Protocol (VoIP) phone as the first network entity.

50. (PREVIOUSLY PRESENTED) A system to discover and maintain geographic location information for network sites, comprising:

means for generating physical coordinates corresponding to the location of a first network entity;

means for loading the physical coordinates generated for the first network entity into one or more network messages;

means for sending the one or more network messages to a selected intermediate network device, the selected intermediate network device having a plurality of ports;

means for receiving the physical coordinates generated for the first network entity on a given port; and

means for associating the received physical coordinates with the given port.

51. (PREVIOUSLY PRESENTED) The system of claim 50, further comprising:

means for binding the received physical coordinates to the given port.

52. (CURRENTLY AMENDED) The system of claim 50, further comprising:

means for generating ~~the~~ one or more network messages at the first network entity for ~~to correspond to~~ an emergency call;

receiving the one or more network messages from the first network entity on the given port of the intermediate network device; and

sending, by the intermediate device, the physical coordinates associate with the given port to a Public Safety Answering Point (PSAP) in response to receiving the one or more network messages for the emergency call .

53. (CANCELLED)

54. (PREVIOUSLY PRESENTED) The system of claim 50, further comprising:

means for using a Voice over Internet Protocol (VoIP) phone as the first network entity.

55. (PREVIOUSLY PRESENTED) An intermediate network device to discover geographic location information for network sites, comprising:

means for receiving a one or more network messages at the intermediate network device, the one or more network messages carrying physical coordinates corresponding to the location of a first network entity, the selected intermediate network device having a plurality of ports, and receiving the physical coordinates generated for the first network entity on a given port; and

means for associating the received physical coordinates with the given port.

56. (PREVIOUSLY PRESENTED) A computer readable media, comprising:

said computer readable media containing instructions for execution on a processor for the practice of a method for operation on an intermediate network device to discover geographic location information for network sites, having,

receiving a one or more network messages at the intermediate network device, the one or more network messages carrying physical coordinates corresponding to the location of a first network entity, the selected intermediate network device having a plurality of ports, and receiving the physical coordinates generated for the first network entity on a given port; and

associating the received physical coordinates with the given port.

57. (NEW) A method for discovering and maintaining geographic location information for network devices, the method comprising the steps of:

interconnecting a first network device to a particular port of an intermediate network device, the first network device including a location generator configured to determine physical coordinates corresponding to the location of the first network device;

transmitting, by the first network device, a message including the physical coordinates of the first network device to the intermediate network device, the intermediate network device receiving the messages on a particular port;

storing the physical coordinates at a memory location of the intermediate network device, the memory location associated with the particular port;

subsequent to the step of transmitting, disconnecting the first network device from the particular port and interconnecting a second network device to the particular port, the

second network device located at substantially the same location as previously occupied by the first network device; and

determining the physical location of the second network device by accessing the memory location associated with the particular port.

58. (NEW) The method of claim 57 wherein the second network device lacks internal capability of determining physical coordinates.

59. (NEW) The method of claim 57 further comprising the step of:

transmitting the physical coordinates to the second network device in response to a request by the second network device.

60. (NEW) The method of claim 57 further comprising the step of:

appending the physical coordinates to an emergency call to a third network device, the emergency call originated by the second network device.

61. (NEW) The method of claim 57 further comprising the step of:

passing the physical coordinates from the intermediate network device to a second intermediate network device, to be stored at the second intermediate network device.

62. (NEW) The method of claim 61 wherein the step of passing further comprise the steps of:

generating an Internet Control Message Protocol (ICMP) message;

loading the physical coordinates into the ICMP message; and

sending the ICMP message to the second intermediate network device.

63. (NEW) The method of claim 57 wherein the first network device is a portable computing unit and the second network device is a Voice over Internet Protocol (VoIP) phone.

64. (NEW) The method of claim 63 wherein intermediate network device is a network switch.

65. (NEW) An intermediate network device configured to maintain geographic location information for network devices, comprising:

a geographical location recording/reporting entity configured to communicate with a first network device coupled to a particular port of the intermediate network device, and configured to receive from the first network device physical coordinates corresponding to the location of the first network device;

a non-volatile memory configured to store the physical coordinates in one or more memory locations associated with the particular port, the physical coordinates thereby associated with the particular port; and

the geographical location recording/reporting entity is further configured to, in response to receiving a request from a second network device coupled to the particular port, assume the second network device is located at substantially the same location as the first network device, and transmit the physical coordinates to the second network device.

66. (NEW) The intermediate network device of claim 65 wherein the non-volatile memory includes a geo-location table indexed by port number, and wherein the memory locations associated with the particular port are part of the geo-location table.

67. (NEW) The intermediate network device of claim 65 wherein the geographical location recording/reporting entity is further configured to append the physical coordinates to an emergency call to a third network device, the emergency call originated by the second network device.

68. (NEW) A method for discovering and using the geographic location information with a Voice over Internet Protocol (VoIP) telephone, the method comprising the steps of:

interconnecting the VoIP telephone to a particular port of a network switch, the particular port associated with a memory entry in a memory of the network switch, the memory entry storing predetermined physical coordinates for use with any network device interconnect to the particular port;

receiving the physical coordinates at the VoIP telephone from the intermediate network device; and

appending, by the VoIP telephone, the physical coordinates to at least one call message transmitted by the VoIP telephone.

69. (NEW) The method of claim 68 wherein the at least one call is part of an emergency call to a Public Safety Answering Point (PSAP).

70. (NEW) The method of claim 68 further comprising the step of:

requesting, by the VoIP telephone, the physical coordinates from the switch.

71. (NEW) The method of claim 70 wherein the step of requesting further comprises the step of:

transmitting one or more Internet Control Message Protocol (ICMP) messages to the network switch.

72. (NEW) A computer readable medium containing executable program instructions for discovering and using geographic location information with a Voice over Internet Protocol (VoIP) telephone, the executable program instructions comprising program instructions adapted for:

transmitting a message from the VoIP Telephone to a particular port of a network switch that is interconnected to the telephone, the message requesting physical coordinates for the VoIP telephone;

in response to the message, receiving the physical coordinates from the switch at the VoIP Telephone;

appending, by the VoIP telephone, the physical coordinates to an emergency call transmitted by the VoIP telephone.

73. (NEW) The computer readable medium of claim 72 wherein the emergency call is to a Public Safety Answering Point (PSAP).